

WHAT IS CLAIMED IS:

1. A method of determining a target noise rise over thermal noise (ROT) for a target cell in a radio network controller (RNC) in a CDMA (Code
5 Division Multiple Access) mobile communication system where ROTs in cells measured by each of a plurality of Node Bs within a coverage area of the RNC are maintained equal to or less than target ROTs for the cells, the method comprising the steps of:
receiving a measurement ROT for the target cell from a Node B that
10 controls the target cell;
adjusting a target ROT for the target cell according to a relation between the measurement ROT and the target ROT for the target cell; and
transmitting the adjusted target ROT to the Node B.
- 15 2. The method of claim 1, wherein the measurement ROT in the target cell is received periodically.
3. The method of claim 1, wherein the measurement ROT in the target cell is received when the measurement ROT is one of less than and greater
20 than the target ROT by a predetermined threshold.
4. The method of claim 1, wherein the measurement ROT in the target cell is received periodically, and when the measurement ROT is one of less
25 than and greater than the target ROT by a predetermined threshold.
5. The method of claim 1, wherein the measurement ROT is received from the Node B and the adjusted target ROT is transmitted to the Node B using Node B application part signaling messages.

6. The method of claim 1, wherein if the measurement ROT is maintained less than the target ROT in the target cell for a predetermined time, the RNC decreases the target ROT, and if the measurement ROT is maintained equal to or greater than the target ROT in the target cell for the predetermined
5 time, the RNC increases the target ROT.

7. An apparatus for determining a target noise rise over thermal noise (ROT) for a target cell in a CDMA (Code Division Multiple Access) mobile communication system where ROTs in cells measured by each of a
10 plurality of Node Bs are maintained equal to or less than target ROTs for the cells, the apparatus comprising:

a Node B for measuring ROTs in the target cell and cells neighboring the target cell within a coverage area of the Node B, transmitting the ROTs, and updating the target ROT for the target cell to an adjusted target ROT; and
15 a radio network controller (RNC) for receiving the ROTs, adjusting the target ROT for the target cell according to a relation between the ROTs and preset target ROT for the target cell, and transmitting the adjusted target ROT to the Node B.

20 8. The apparatus of claim 7, wherein the Node B transmits the ROTs periodically to the RNC.

9. The apparatus of claim 7, wherein the Node B transmits the ROTs to the RNC if the ROTs are one of less than and greater than the target
25 ROTs by a predetermined threshold.

10. The apparatus of claim 7, wherein the Node B transmits the ROTs to the RNC periodically, and when the ROTs are one less than and greater than the target ROT by a predetermined threshold.

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11. The apparatus of 7, wherein the Node B transmits the ROTs to the RNC and the RNC transmits the adjusted target ROT to the Node B using Node B application part signaling messages.

5 12. The apparatus of claim 7, wherein if the ROT is maintained less than the target ROT in the target cell for a predetermined time, the RNC decreases the target ROT, and if the ROT is maintained equal to or greater than the target ROT in the target cell for the predetermined time, the RNC increases the target ROT.

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